AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings of the claims in the application:

1. (Currently Amended) A computer-implemented method for tracking and monitoring a patient's compliance with a prescription for a medical device, comprising:

(a) obtaining at ~~via~~ a computing device a minimum medical device usage compliance value for a medical device for a predetermined compliance period;

(b) obtaining at ~~via~~ the computing device a quantity of the compliance periods in a measurement cycle;

(c) obtaining at ~~via~~ the computing device measurements of actual medical device usage of the medical device during the measurement cycle ;

(d) weighting, within ~~via~~ the computing device, the measurements of medical device usage for individual usage sessions during the measurement cycle according to a predetermined weighting scheme; and

(e) determining, within ~~via~~ the computing device, whether a compliance period value for the measurement cycle~~, as the number of compliance periods in the measurement cycle for which the weighted measurements of medical device usage indicate that the actual medical device usage has satisfied the compliance value,~~ is at least equal to the minimum medical device usage compliance value, <u>wherein the compliance period value for the measurement cycle is determined on the computing device as the number of compliance periods in the measurement cycle for which the weighted measurements of medical device usage indicate that the actual medical device usage has satisfied the compliance value, and</u> wherein the weighted measurements of medical device usage indicate actual medical device usage has satisfied the compliance value ~~if,~~ for a given compliance period <u>responsive to</u> ~~,~~ the sum of the weighted measurements for the usage sessions that occurred during the given compliance period <u>being</u> ~~is~~ greater than or equal to the compliance value.

2. (Previously Presented) The method of claim 1, further comprising:

(f) obtaining, at the computing device, a medical device usage prescription value ; and

(g) comparing, via the computing device, the compliance period value with the medical device usage prescription value.

3. (Previously Presented) The method of claim 1, wherein the compliance period value is determined as a percentage of compliance periods in the measurement cycle in which the weighted measurements of medical device usage indicate actual medical device usage has satisfied the compliance value-.

4. (Currently Amended) The method of claim 1, further comprising:

(f) obtaining, at the computing device, a measurement cycle compliance value ~~to the computing device~~;

(g) comparing, in the computing device, the compliance period value with the measurement cycle compliance value; and

(h) providing a compliance indicator from the computing device based upon results of the comparison.

5. (Original) The method of claim 4, wherein the compliance indicator indicates (1) a compliance signal responsive to the compliance period value being at least equal to the measurement cycle compliance value, and (2) a non-compliance signal responsive to the compliance period value being less than the measurement cycle compliance value.

6. (Original) The method of claim 4, wherein the compliance indicator indicates a compliance signal, a non-compliance signal, a marginal compliance signal, a warning signal, a trend signal, a compliance value signal, or any combination thereof.

7. (Original) The method of claim 4, further comprising (i) creating a report based upon the compliance indicator and indicative of at least one patient's compliance with at least one of a medical device usage prescription value, a minimum medical device usage value and a measurement cycle compliance value.

8. (Original) The method of claim 7, wherein the report is in the form of at least one of a list, a chart, a diagram and a graph.

9. (Previously Presented) The method of claim 1, further comprising:

(f) obtaining, at the computing device, a compliance warning value ;

(g) comparing, in the computing device, the compliance period value with the compliance warning value; and

(h) generating, by the computing device, a warning signal responsive to the comparison of the compliance period value with the compliance warning value.

10. (Original) The method of claim 9, wherein the compliance warning value is set by a user.

11. (Original) The method of claim 9, wherein the warning signal is an audible alarm, a visual display, or both.

12. (Original) The method of claim 9, wherein the warning signal is a visual display and includes an alphanumeric message.

13. (Original) The method of claim 12, wherein the alphanumeric message is user-defined.

14. (Original) The method of claim 1, wherein the compliance period is a 12-hour period, a 24-hour period, a multi-day period, a weekly period, a multi-weekly period, a monthly period, a multi-monthly period, an annual period, or a multi-yearly period.

15. (Previously Presented) The method of claim 1, wherein the compliance period is a fixed period of time, a rotating period of time, or a dynamic period of time.

16. (Original) The method of claim 1, wherein the measurement cycle is a 12-hour period, a 24-hour period, a multi-day period, a weekly period, a multi-weekly period, a monthly period, a multi-monthly period, an annual period, or a multi-yearly period.

17. (Original) The method of claim 1, wherein the medical device is a ventilator, a pressure support system, an oximeter, a ventilatory support system, an oxygen concentrator, a nebulizer, a humidifier, a phototherapy device, an immersion therapy device, or a physical therapy device.

18. (Original) The method of claim 1, wherein the actual medical device usage value is based upon operation of at least one component of the medical device.

19. (Original) The method of claim 18, wherein the component is one of a blower, a battery, a power input and a motor.

20. (Original) The method of claim 1, wherein the actual medical device usage value is based upon a measured physical parameter.

21. (Original) The method of claim 20, wherein the measured physical parameter is one of a flow rate, a pressure differential, a temperature, a density, a mass analysis and a constituent identification.

22. (Original) The method of claim 1, wherein at least one of the minimum medical device usage compliance value, the compliance period, the measurement cycle, the compliance period value, the actual medical device usage value, a medical device usage prescription value, a usage session, an actual medical device session usage value, a weighting factor, a minimum medical device usage short session value, a short session count value, a short session warning value, a measurement cycle compliance value, a compliance indicator, a compliance warning signal, a compliance signal, a non-compliance signal, a marginal compliance signal, a trend signal, a compliance value signal, a compliance warning value, a medical device operation signal, a measured physical parameter, a flow rate, a pressure differential, a temperature, a density, a mass analysis and a constituent identification is communicated between the medical device and a remote computing system by at least one of a user, a direct link, a telecommunications data link, and a temporary storage medium.

23. (Original) The method of claim 1, wherein at least one of the minimum medical device usage compliance value, the compliance period, the measurement cycle, the compliance period value, the actual medical device usage value, a medical device usage prescription value, a usage session, an actual medical device session usage value, a weighting factor, a minimum medical device usage short session value, a short session count value, a short session warning value, a measurement cycle compliance value, a compliance indicator, a compliance warning signal, a compliance signal, a non-compliance signal, a marginal compliance signal, a trend signal, a compliance value signal, a compliance warning value, a medical device operation signal, a measured physical parameter, a flow rate, a pressure differential, a temperature, a density, a mass analysis and a constituent identification is stored as data fields on a central database.

24. (Original) The method of claim 23, wherein the central database is resident on one of a computing system, a home care provider network, a primary care provider network, an insurance network and a manufacturer network.

25. (Cancelled)

26. (Cancelled)

27. (Previously Presented) The method of claim 1, wherein weighting the measurements of medical device usage comprises :

determining, within the computing device, weighting factors for individual usage sessions during the measurement cycle according to the predetermined weighting scheme ; and

applying, within the computing device, the weighting factors to measurements of medical device usage for the corresponding usage sessions.

28. (Previously Presented) The method of claim 27, wherein the weighting factor determined for an individual usage session is variable dependent upon the measurement of medical device usage for the individual usage session.

29. (Original) The method of claim 28, wherein the weighting factor is in a range from 0 to 1.

30. (Currently Amended) The method of claim 1, further comprising the steps of:

obtaining, at ~~via~~ the computing device, a minimum medical device usage short session value ;

comparing, <u>within</u> ~~via~~ the computing device, the measurements of medical device usage during the usage sessions of a compliance period with the minimum medical device usage short session value; and

determining, <u>within</u> ~~via~~ the computing device, a short session count value based upon the number of usage sessions wherein the measurement of medical device usage for the respective usage session is less than the minimum medical device usage short session value.

31. (Currently Amended) The method of claim 30, further comprising the steps of:

obtaining, <u>within</u> ~~via~~ the computing device, a short session warning value ;

comparing, <u>within</u> ~~in~~ the computing device, the short session count value with the short session warning value; and

generating, <u>within</u> ~~via~~ the computing device, a warning signal responsive to the short session count value being equal to the short session warning value.

32. (Original) The method of claim 31, wherein the short session warning value is set by a user.

33. (Original) The method of claim 31, wherein the warning signal is at least one of an audible alarm and a visual display.

34. (Original) The method of claim 31, wherein the warning signal is a visual display and includes an alphanumeric message.

35. (Original) The method of claim 34, wherein the alphanumeric message is user-defined.

36. (Currently Amended) A computer-implemented method for tracking and monitoring a patient's compliance with a prescription for a medical device during a compliance period comprising:

(a) receiving, at ~~via~~ a computing device, a minimum medical device usage short session value;

(b) receiving, at ~~via~~ the computing device, measurements of medical device usage for at least one discrete medical device usage session;

(c) comparing, within the computing device, the measurement of medical device usage for each medical device usage session with the minimum medical device usage short session value;

(d) determining, within the computing device, a medical device usage value for the compliance period by summing the measurements of medical device usage for each medical device usage session that is greater than or equal to the minimum medical device usage short session value and excluding from the sum each measurement of medical device usage during a medical device usage session during the compliance period that is less than the minimum medical device usage short session value .

37. (Currently Amended) A computer-implemented method for tracking and monitoring a patient's compliance with a prescription for a medical device during a compliance period comprising:

(a) obtaining, at ~~via~~ a computing device, measurements of actual medical device usage ~~value~~ for each discrete medical device usage session;

(b) applying, within ~~via~~ the computing device, a weighting factor to the measurements of actual device usage during each of the usage sessions to produce a weighted actual medical device session usage value for each medical device usage session; and

(c) determining, within ~~via~~ the computing device, an actual medical device usage value for the compliance period by summing the weighted actual medical device usage values for the medical device usage sessions during the compliance period.

38. (Previously Presented) The method of claim 37, wherein the weighting factor for a particular usage session is variable dependent upon the measurement of medical device usage during the particular usage session.

39. (Original) The method of claim 38, wherein the weighting factor is in a range from 0 to 1.

40. (Currently Amended) A computer-implemented method for tracking and monitoring a patient's compliance with a prescription for a medical device during a compliance period comprising:

(a) obtaining, at ~~via~~ a computing device, a minimum medical device usage short session value;

(b) obtaining, at ~~via~~ the computing device, a measurement of medical device usage ~~value~~ for at least one discrete medical device usage session;

(c) comparing, within ~~via~~ the computing device, the measurements of medical device usage for individual ones of the at least one discrete usage session with the minimum medical device usage short session value; and

(d) determining, within the computing device, a short session count value based upon the number of usage sessions wherein the measurement of medical device usage for the respective usage session is less than the minimum medical device usage short session value.

41. (Currently Amended) The method of claim 40, further comprising the steps of:

(e) obtaining, at ~~via~~ the computing device, a short session warning value;

(f) comparing, within ~~in~~ the computing device, the short session count value with the short session warning value; and

(g) generating, by the computing device, a warning signal responsive to the short session count value being equal to the short session warning value.

42. (Original) A system for tracking and monitoring a patient's compliance with a prescription for a medical device, comprising:

(a) a medical device adapted to provide a treatment to a patient;

(b) means for monitoring an actual medical device usage; and

(c) processing means for determining a compliance period value as a number of compliance periods in a measurement cycle in which the actual medical device usage value is at least equal to a minimum medical device usage compliance value.

43. (Original) The system of claim 42, wherein the processing means compares the compliance period value with a medical device usage prescription value.

44. (Original) The system of claim 42, wherein the processing means determines the compliance period value as a percentage of compliance periods in the measurement cycle in which the actual medical device usage value is at least equal to the minimum medical device usage compliance value.

45. (Original) The system of claim 42, wherein the processing means compares the compliance period value with a measurement cycle compliance value, and further comprising means for outputting a compliance indicator based upon results of the comparison.

46. (Original) The system of claim 45, wherein the compliance indicator indicates (1) a compliance signal responsive to the compliance period value being at least equal to the measurement cycle compliance value, and (2) a non-compliance signal responsive to the compliance period value being less than the measurement cycle compliance value.

47. (Original) The system of claim 45, wherein the compliance indicator indicates a compliance signal, a non-compliance signal, a marginal compliance signal, a warning signal, a trend signal, a compliance value signal, or any combination thereof.

48. (Original) The system of claim 45, wherein the outputting means creates a report based upon the compliance indicator and indicative of at least one patient's compliance with at least one of a medical device usage prescription value, a minimum medical device usage value and a measurement cycle compliance value.

49. (Original) The system of claim 42, wherein the processing means compares the compliance period value with a compliance warning value, and further comprising outputting means for presenting a warning signal responsive to the compliance period value being equal to the compliance warning value.

50. (Original) The system of claim 42, wherein the medical device is a ventilator, a pressure support system, an oximeter, a ventilatory support system, an oxygen concentrator, a nebulizer, a humidifier, a phototherapy device, an immersion therapy device, or a physical therapy device.

51. (Original) The system of claim 42, wherein the means for monitoring usage and the processing means are resident in the medical device.

52. (Original) The system of claim 42, further comprising a communication device associated with the medical device, and wherein the means for monitoring usage is resident in the medical device and the processing means is resident in the communication device.

53. (Original) The system of claim 42, further comprising:
(e) a communication device associated with the medical device; and

(f) a central database remote from the medical device and in communication therewith via the communication device.

54. (Original) The system of claim 42, wherein the processing means determines the actual medical device usage value for the compliance period based upon an actual medical device session usage value determined for each of a plurality of discrete usage sessions.

55. (Original) The system of claim 54, wherein the processing means determines the actual medical device usage value for the compliance period as a sum of the actual medical device session usage values accruing during the compliance period.

56. (Original) The system of claim 54, wherein the processing means applies a weighting factor to at least one actual medical device session usage value.

57. (Original) The system of claim 56, wherein the weighting factor is variable dependent upon the actual medical device session usage value.

58. (Original) The system of claim 56, wherein the weighting factor is in a range from 0 to 1.

59. (Original) The system of claim 42, wherein the input means is used to provide a minimum medical device usage short session value to the processing means, wherein the processing means (1) compares the actual medical device usage value for a discrete usage session with the minimum medical device usage short session value; and (2) determines a short session count value based upon the number of usage sessions wherein the actual medical device usage value for the respective usage session is less than the minimum medical device usage short session value.

60. (Original) The system of claim 59, wherein the processing means compares the short session count value with a short session warning value, and further comprising an outputting means for presenting a warning signal responsive to the short session count value being equal to the short session warning value.

61. (Previously Presented) A system for tracking and monitoring a patient's compliance with a prescription for a medical device during a compliance period comprising:

(a) a medical device adapted to provide a treatment to a patient;

(b) means for monitoring an actual medical device usage for at least one discrete medical device usage session during a compliance period; and

(c) processing means for (1) comparing the actual medical device usage value for each medical device usage session with the minimum medical device usage short session value and (2) determining an actual medical device usage value for the compliance period by summing the actual medical device usage value for each medical device usage session during the compliance period that is greater than or equal to the minimum medical device usage short session value and excluding from the sum the actual medical device usage values for medical device usage sessions during the compliance period that are less than the minimum medical device usage short session value.

62. (Previously Presented) A system for tracking and monitoring a patient's compliance with a prescription for a medical device during a compliance period comprising:

(a) a medical device adapted to provide a treatment to a patient;

(b) means for monitoring an actual medical device usage for at least one discrete medical device usage session; and

(c) processing means for (1) applying a weighting factor to each actual medical device session usage value to produce a weighted actual medical device session usage value for each medical device usage session, and (2) determining an actual medical device usage value for

the compliance period by summing the weighted actual medical device usage values for the
medical device usage sessions during the compliance period.

63. (Original) The system of claim 62, wherein the weighting factor is variable
dependent upon the actual medical device session usage value.

64. (Original) The system of claim 62, wherein the weighting factor is in a range
from 0 to 1.

65. (Original) A system for tracking and monitoring a patient's compliance with
a prescription for a medical device during a compliance period comprising:

    (a) a medical device adapted to provide a treatment to a patient;

    (b) means for monitoring an actual medical device usage for at least one discrete
medical device usage session; and

    (c) processing means for (1) comparing the actual medical device usage value for
a discrete usage session with a minimum medical device usage short session value, and (2)
determining a short session count value based upon the number of usage sessions where the
actual medical device usage value for the respective usage session is less than the minimum
medical device usage short session value.

66. (Original) The system of claim 65, wherein the processing means also
compares the short session count value with a short session warning value, and further
comprising and outputting means for presenting a warning signal responsive to the short session
count value being equal to the short session warning value.